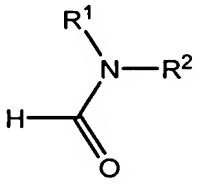
Amendments to the Claims

Please cancel claims 1-20 without prejudice. Please add new claims 21-44 as shown below in the list of claims.

List of Claims

21. (New) A process for preparing 2-amino-4,6-dichloro-5-formamidopyrimidine from 2,5-diamino-4,6-dihydroxypyrimidine, or a salt or tautomeric form thereof, comprising:

a) reacting said 2,5-diamino-4,6-dihydroxypyrimidine, salt or tautomeric form with a chlorinating agent and a formamide of formula (I)



(I)

wherein

R^1 and R^2 are each independently: a C_1-C_4-alkyl radical; or are joined together to form the ring $-(CH_2)_n-$ where n is an integer from 4 to 6; or together form the ring $-(CH_2)_2-O-(CH_2)_2-$;

wherein the reaction is carried out without the addition of a solvent and at a temperature of from 50 to 130°C;

b) reacting the product produced in the reaction of step a) with water at a temperature of from 0 to 100°C and then adjusting the pH to between 1.0 and 6.0 with an inorganic base; and

c) hydrolyzing the aqueous reaction mixture produced in step b) at a temperature from 70 to 120°C to give 2-amino-4,6-dichloro-5-formamidopyrimidine.

22. (New) The process of claim 21, wherein the starting material used is 2,5-diamino-4,6-dihydroxypyrimidine in the form of a hemisulfate, hydrochloride monohydrate or as an anhydrous hydrochloride.

23. (New) The process of claim 21, wherein the starting material used is anhydrous 2,5-diamino-4,6-dihydroxypyrimidine hydrochloride.

24. (New) The process of claim 21, wherein said chlorinating agent is an acid chloride.

25. (New) The process of claim 24, wherein said chlorinating agent is selected from the group consisting of phosgene; oxalyl chloride; chloromethylenedimethylammonium chloride; thionyl chloride; sulfuryl chloride; phosphorus trichloride; phosphorus pentachloride; and phosphorus oxychloride.

26. (New) The process of claim 21, wherein the formamide of formula (I) is first reacted with said chlorinating agent and 2,5-diamino-4,6-dihydroxypyrimidine is then added.

27. (New) The process of claim 21, wherein the formamide of formula I is selected from the group consisting of: N,N-dimethylformamide; N-formylpyrrolidine; N-formylpiperidine; N-formylmorpholine; and N,N-dimethylformamide.

28. (New) The process of claim 21, wherein from 1.0 to 5.0 mol of formamide of formula (I) are used per mole of 2,5-diamino-4,6-dihydroxypyrimidine.

29. (New) The process of claim 28 wherein from 3.0 to 7.0 mol of chlorinating agent are used per mole of 2,5-diamino-4,6-dihydroxypyrimidine.

30. (New) The process of claim 21, wherein the reaction step a) is carried out within a temperature range of from 70 to 110°C.

31. (New) The process of claim 21, wherein the inorganic base used in step b) is a base which forms soluble chloride salts.

32. (New) The process of claim 21, wherein the inorganic base used in step b) is selected from the group consisting of: sodium hydroxide solution; sodium hydroxide; sodium carbonate; sodium hydrogencarbonate; potassium hydroxide solution; potassium hydroxide; potassium carbonate; and potassium hydrogencarbonate.

33. (New) The process of claim 32, wherein the inorganic base used in step b) is sodium hydroxide solution.

34. (New) The process of claim 21, wherein from 2 to 3 mol of inorganic base are used per mole of chlorinating agent.

35. (New) The process of claim 21, wherein, in the neutralization in step b), pH is adjusted to between 2.0 and 5.0.

36. (New) The process of claim 35, wherein, in the neutralization in step b), pH is adjusted to between 3.0 and 4.0.

37. (New) The process of claim 36, wherein the reaction product from step a) is reacted at a temperature of from 20 to 60°C.

38. (New) The process of claim 37, wherein the hydrolysis in step c) is carried out at a temperature of 70-120°C.

39. (New) The process of claim 37, wherein the hydrolysis in step c) is carried out at a temperature of 80 to 100°C.

40. (New) The process of claim 21, wherein step c) is carried out in the absence of an added solvent.

41. (New) The process of claim 21, wherein said process is carried out without the isolation of intermediates, as a one-pot reaction.

42. (New) A process for preparing purine derivatives, comprising the process steps of claim 20, and further comprising the conversion of 2-amino-4,6-dichloro-5-formamidopyrimidine to a purine derivative.

43. (New) A process for preparing an active pharmaceutical ingredient, comprising the process steps of claim 40 and further comprising the conversion of said purine derivative to said active pharmaceutical ingredient.

44. (New) The process of claim 43, wherein said active pharmaceutical ingredient is an antiviral medicament.

45. (New) The process of claim 44, wherein said antiviral medicament is a medicament for the treatment of AIDS.